

WHAT IS CLAIMED IS

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1. An apparatus for controlling call admission, comprising a call admission check unit which determines whether to admit a call in response to reception of the call based on a threshold that  
10 reflect history of base station transmission power.

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2. The apparatus as claimed in claim 1, further comprising an averaging unit which obtains an average of past samples of the base station transmission power, wherein said call admission check unit determines whether to admit the call by  
20 comparing the threshold with a sum of the average of past samples and transmission power required for the call.

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3. The apparatus as claimed in claim 1, further comprising an averaging unit which obtains a median of past samples of the base station  
30 transmission power, wherein said call admission check unit determines whether to admit the call by comparing the threshold with a sum of the median of past samples and transmission power required for the

call.

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4. The apparatus as claimed in claim 2,  
further comprising a packet-switching-call-  
proportion estimating unit which estimates a  
proportion of packet switching calls in a total  
10 number of calls based on past samples of the base  
station transmission power, wherein the threshold  
reflects the estimated proportion.

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5. The apparatus as claimed in claim 4,  
wherein said packet-switching-call-proportion  
estimating unit measures a volatility of the base  
20 station transmission power as the estimated  
proportion over a predetermined time period.

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6. The apparatus as claimed in claim 5,  
wherein said packet-switching-call-proportion  
estimating unit obtains a variance as a measure of  
said volatility.

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7. The apparatus as claimed in claim 5,

further comprising a threshold computation unit which computes the threshold concerning a present instant based on the average of past samples, the measured volatility, and the threshold concerning a  
5 previous instant.

10 8. The apparatus as claimed in claim 5, further comprising a threshold computation unit which computes the threshold concerning a present instant by adjusting the threshold concerning a previous instant in response to the measured  
15 volatility and by placing the threshold concerning the present instant within a tolerance range if the threshold concerning the present instant falls outside a tolerance range.

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9. The apparatus as claimed in claim 5, further comprising:

25 a memory unit which stores therein a table of volatilities and associated thresholds; and  
a threshold computation unit which obtains the threshold by referring to the table and finding in the table a threshold associated with the  
30 volatility measured by said packet-switching-call-proportion estimating unit.

10. The apparatus as claimed in claim 5,  
further comprising a threshold computation unit  
which determines the threshold by performing a  
statistical test based on the average obtained by  
5 averaging unit and the volatility measured by said  
packet-switching-call-proportion estimating unit,  
such that a possibility of the base station  
transmission power exceeding a first predetermined  
percentage is adjusted to a second predetermined  
10 percentage.

11. The apparatus as claimed in claim 2,  
further comprising a threshold computation unit  
which determines the threshold concerning a present  
instant by adjusting the threshold concerning a  
previous instant in response to whether compression  
15 is present or absent in multiplexing base-band  
signals.

12. The apparatus as claimed in claim 1,  
further comprising a peak-hold unit which obtains a  
peak of the base station transmission power within a  
predetermined period, wherein said call admission  
25 check unit determines whether to admit the call by  
comparing the threshold with a sum of the peak and  
transmission power required for the call.

13. A base station which checks admission of received calls for providing communication services to a plurality of users, comprising a call admission check unit which determines whether to
- 5 admit a call in response to reception of the call based on a threshold that reflect history of transmission power of said base station.

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